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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,391	03/12/2004	Claude Decroix	MEISS81.001AUS	7187
20995	7590	01/31/2006		
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER SMITH, TIMOTHY SCOTT	
			ART UNIT	PAPER NUMBER
			3632	
DATE MAILED: 01/31/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/800,391	Applicant(s) DECROIX, CLAUDE	
	Examiner Timothy S. Smith	Art Unit 3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3-12-04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action represents a non-final first Office Action for the application titled "A CONNECTION ASSEMBLY FOR A GRID STRUCTURE," filed March 12, 2004.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,688,803 to Marie Van Giezen et al. in view of U.S. Patent No. 4,321,068 to Cottrell et al.

With respect to claims 1-3 and 6-14, Maria Van Giezen et al. '803 discloses a connection assembly (figures 4,5,10) comprising a plurality of first (1) and second (2) elongate elements forming a grid structure connected to one another at an intersection with a bond or weld (columns 2 and 4, lines 13-22 and 65-67, respectively), the first element (1) comprising a tube and defining at least one receiving opening/aperture (3) through which the second element is passed, wherein the first element defines two aligned receiving openings (3, both sides) through which the second element is passed; wherein the inner surface of the first element is provided with at least one ridge (5) the apex of which lies close to or contacts the outer surface of the second element at a position, wherein the first and second elements are connected to one another at one or

more positions in the region of their intersection (see figure 5), wherein the position is formed where the outer surface of the second element lies opposed to the inner surface of the first element at the apex of the ridge, wherein the first and second elements are made of metal and connected to one another at the positions via welding (column 4, lines 65-67), wherein the first and second elements are alternatively made of plastics material and are connected at the one or more positions by melt bonding (column 2, lines 18-22, "fusion bonding"), wherein the first and second elements are tubular with substantially circular cross sections, wherein the diameter of the second element is smaller by between 20% to 30% than the diameter of the first element (column 4, lines 8-12).

However, Maria Van Giezen et al. '803 fails to specifically teach the portions of the first element defining the peripheries of both of the receiving openings protruding inwards into the tube to define two collars surrounding the second element; wherein an inner dimension of each collar is dimensioned with respect to an outer dimension of the second element so as to provide a frictional fit of the two elements.

Nevertheless, Cottrell et al. '068 discloses a connection assembly (figures 1,2) comprising first and second elongate elements (11,12) connected to one another at an intersection, the first element comprising a tube and defining at least one receiving opening (15) through which the second element is passed, and characterized in that the portion of the first element defining the periphery of the receiving opening protrudes inwards into the tube to define a collar (near 15, see figure 2) surrounding the second element; wherein the first element defines two aligned receiving openings (see figure 2)

through which the second element is passed, the portions of the first element defining the peripheries of both of the receiving openings protruding inwards into the tube to define two collars surrounding the second element; wherein an inner dimension of each collar is dimensioned with respect to an outer dimension of the second element so as to provide a frictional fit of the two elements (see figure 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the periphery of each receiving opening of Maria Van Giezen et al. '803 to protrude inwards into the tube to define a collar surrounding the second element so as to provide a frictional fit of the two elements in order to increase the area around the openings engaged by the second element hence providing for a more structurally sound grid structure.

Further, regarding claims 4 and 5, the diameter of the aperture is inherently less than the diameter of the second element (see column 1, line 66 through column 2, line 2 of Cottrell et al. '068, when the second element 12 is inserted into the receiving opening, it takes advantage of the natural spring formed by the material, hence, before the second element 12 is inserted into the receiving opening, the diameter of the receiving opening must be less than that of the second element 12), wherein the diameter of the aperture is equal to that of the opening, wherein the openings/apertures could inherently be drilled or punched (it is noted that the "drilling," and "folding" of claims 4 and 5 are merely functional recitations since independent claim 1 is structural claim and thus all claimed dependent thereon are also considered structural claims).

Response to Arguments

3. Applicant's arguments filed October 31, 2005 have been fully considered but they are not persuasive. In response to applicant's argument that one would not have been motivated to combine the teachings of Van Giezen and Cottrell because the collars of Cottrell are meant to obviate or mitigate the difficulties with welding, Cottrell specifically provides that welding may still be used as an alternative method of connecting the first and second elongate elements (column 2, lines 36-37) to each other.

Conclusion


4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy Smith whose telephone number is 571-272-8296. The examiner can normally be reached on M-F: 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on 571-272-6788. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

TSS

Timothy S. Smith
Patent Examiner
Art Unit 3632
January 25, 2006


ROBERT P. OLSZEWSKI
PERMISSORY PATENT EXAMINER
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